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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,915	03/16/2004	Hakan Wernersson	TPP 31725	9620

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Washington, DC 20036

EXAMINER

PAINTER, BRANON C

ART UNIT	PAPER NUMBER
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3609

MAIL DATE	DELIVERY MODE
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07/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/800,915	WERNERSSON, HAKAN	
	Examiner	Art Unit	
	Branon C. Painter	3609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/16/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Sweden on 03/18/2003. It is noted, however, that applicant has not filed a certified copy of the Swedish patent application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 03/16/2004 is being considered by the examiner.

Specification

3. The abstract of the disclosure is objected to because of the following informality: the title "ABSTRACTS" should be written "ABSTRACT." Correction is required. See MPEP § 608.01(b).
4. The disclosure is objected to because of the following informalities:
 - a. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.

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- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

- b. Page 1, paragraph 3, "These profiles, which extends outside the floor panel itself, is provided..." For the purpose of this examination, the examiner presumes that the statement above should read "These profiles, which extend outside the floor panel itself, is provided..." Appropriate correction is required.
- c. Page 4, paragraph 1, "It is according to different embodiments according to the invention possible to achieve different friction coefficients it is..." For the purpose of this examination, the examiner presumes that the statement above should read "According to different embodiments of the invention it is possible to achieve different friction coefficients. It is..." Appropriate correction is required.

- d. Page 4, paragraph 3, "As examples of suitable rubber materials can be mentioned; silicon..." For the purpose of this examination, the examiner presumes that the statement above should read "Examples of suitable rubber materials are silicon...". Appropriate correction is required.

Claim Objections

5. Claims 7 and 14 are objected to because of the following informalities:
 - a. Claim 7: "surfaces of the edge is coated." For the purpose of this examination, the examiner presumes that the statement above should read "surfaces of the edges are coated." Appropriate correction is required.
 - b. Claim 14: "surfaces of the edges is provided with splines." For the purpose of this examination, the examiner presumes that the statement above should read "surfaces of the edges are provided with splines." Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 2 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites the limitation "larger than 100N per meter of joint length, preferably larger than 1000N per meter of joint length" in lines 2-4. It

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is unclear whether 100N or 1000N per meter of joint length is being claimed. For the purposes of this examination, the examiner assumes 100N per meter of joint length is being claimed.

8. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 2 recites the broad recitation "larger than 100N per meter of joint length," and the claim also recites "preferably larger than 1000N per meter of joint length" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

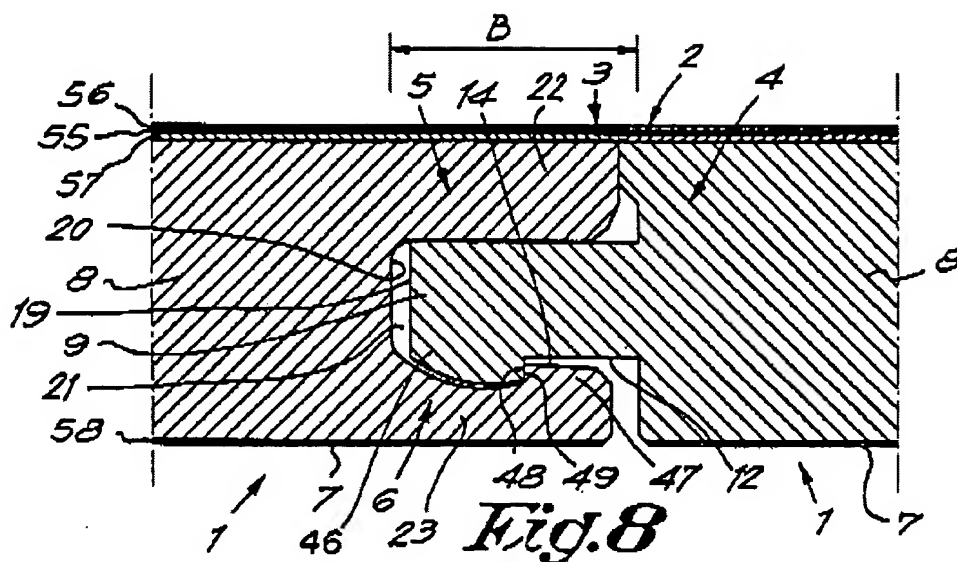
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Moriau et al.

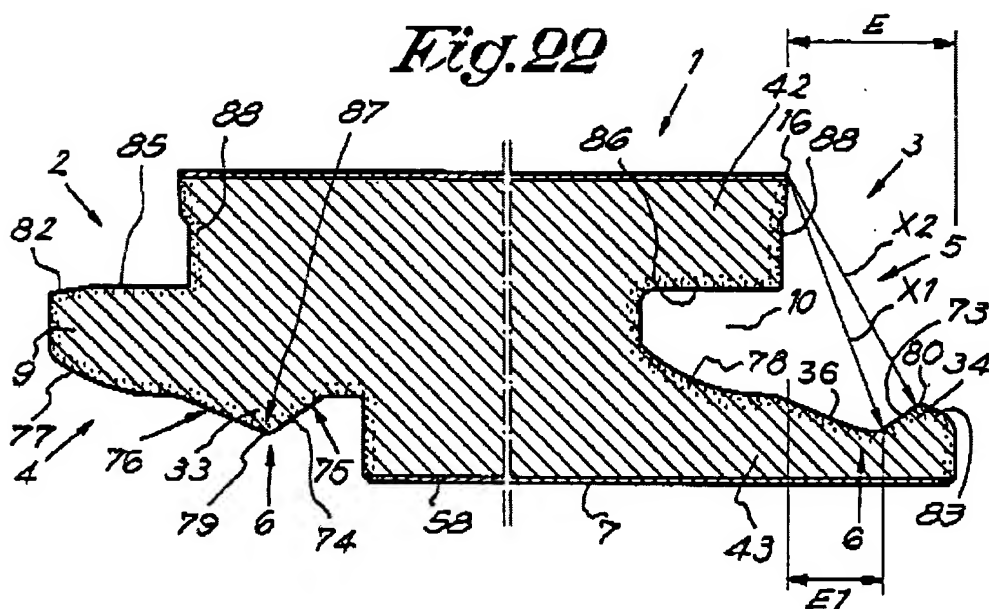
(U.S. Patent No. 6,006,486).

11. Regarding claim 1, Moriau et al. discloses a joint a joint having all of the applicant's claimed structure, including:

- a. "A panel joint... wherein edges of said panels are provided with a core"
("core" 8, Fig. 8).
- b. "...means for mechanically locking said panels toward one another via interacting locking surfaces..." ("tongue" 9 and "groove" 10, Fig. 22).
- c. "...edges further comprising friction enhancing means." ("According to a second possibility, ...the floor panels mutually match into each other by means of a tongue and groove coupling, whereby mostly they are glued together in the tongue and groove," column 1, lines 21-25).



Reproduced from Moriau et al. (U.S. Patent No. 6,006,486)



Reproduced from Moriau et al. (U.S. Patent No. 6,006,486)

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 2-6 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriau et al. (U.S. Patent No. 6,006,486) in view of Palsson (International Publication Number WO 01/75247).
 2. Regarding claims 1-6:
 - a. Moriau et al. discloses a joint as set forth above [claim 1], further comprising: edges provided with a rough surface ("tongue" 9 and "groove" 10, Fig. 22) [claim 3]; a core made of a wood-based material wherein the rough surface is achieved by wetting with a liquid causing the fibre of the core to rise ("for the core use shall be made of so-called HDF board (high density fiberboard) or MDF (Medium Density Fiberboard) which is highly compressed ground wood particles and binder material," column 3, lines 32-35) [claim 4]; and wherein the liquid is a lacquer binding agent ("floor panels 1 are treated...with a surface densifying agent...which is chosen from the following series of products:...lacquers," column 13, lines 16-20) [claims 5 and 6].

- b. The examiner notes that, with regard to claim 4, while Moriau et al. does not explicitly state that the application of liquid lacquer to the joint surface causes the fibre of the core to rise, the rising of core fibres is inherently caused by the application of a wetting agent (in this case, liquid lacquer).
- c. The examiner further notes that, with regard to claim 5, while Moriau et al. does not explicitly state that the lacquer is used as a binding agent, it is inherently capable of performing the functions of a binding agent.
- d. Moriau et al. does not expressly disclose that the force needed to overcome static friction along the joint between two assembled panels is larger than 100N per meter length [claim 2].
- e. Palsson discloses a floor joint where "The force needed to overcome the static friction along the joint between the two completely assembled male and female joining members is...suitably larger than 100N per meter of joint length" (page 3, paragraph 5) [claim 2]. Constructing a joint with high separation force as taught by Palsson provides a stronger, more reliable connection between panels.
- f. Moriau et al. and Palsson are analogous art because both are from the field of endeavor of interlocking floor panels.
- g. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the separation force requirements taught by Palsson to the joint of Moriau et al. in order to create a stronger connection between adjacent panels.

14. Regarding claims 14-16:

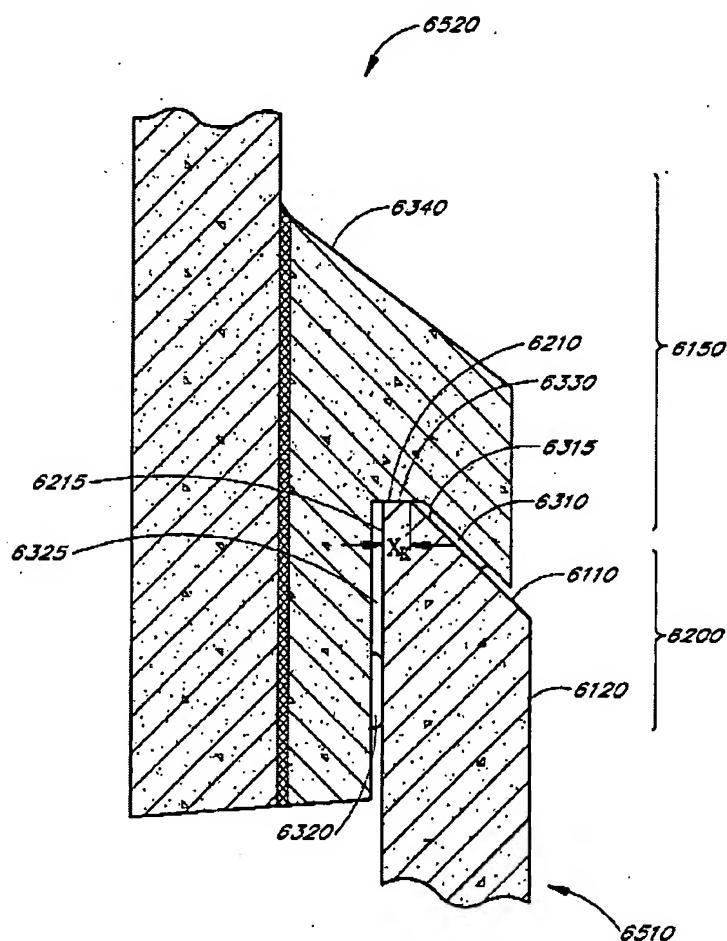
- a. Moriau et al. discloses a joint as set forth above [claim 1], further comprising: edges provided with a rough surface [claim 3] wherein the edges are provided with splines [claim 14] that are arranged at an angle toward the edge extension [claim 15] ("tongue" 9 and "groove" 10, Fig. 22); and a joint with a jagged profile arranged between the edge surfaces [claim 16] ("tongue" 9 and "groove" 10, Fig. 22).

15. Claims 1, 2, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colada et al. (U.S. Pub. No. 2003/0046891) in view of Palsson (International Publication Number WO 01/75247).

- a. Colada et al. discloses a joint having all of the structure of claim 1, including:
 - i. "A panel joint... wherein edges of said panels are provided with a core" (Fig. 29).
 - ii. "...means for mechanically locking said panels toward one another via interacting locking surfaces..." ("key" 6200 and "lock" 6150, Fig. 29).
 - iii. "...edges further comprising friction enhancing means." ("first and second compressible regions" 6310 and 6320, Fig. 29).
- b. Colada et al. further discloses: a joint where predetermined surfaces are coated with a high friction polymer ("first and second compressible regions" 6310 and 6320, Fig. 29) [claim 7]; wherein the polymer is a natural rubber [claim 8] or synthetic rubber [claim 9] such as silicon rubber [claim 10] ("First compressible region 6310 and second compressible region 6320 may be

- constructed of compressible materials, such as polyurethane elastomeric foam, rubber, rubber foam, or silicon rubber,” page 13, paragraph 235).
- c. With regard to claim 8, the examiner notes that it would be obvious to use natural rubber, since natural rubber is a specific type of rubber, which was disclosed by Colada et al.
 - d. Furthermore, the examiner notes that Colada et al. in view of Palsson discloses the claimed invention except for natural rubber. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the compressible regions from natural rubber, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.
 - e. Colada et al. does not expressly disclose that the force needed to overcome static friction along the joint between two assembled panels is larger than 100N per meter length [claim 2].
 - f. Palsson discloses a floor joint where “The force needed to overcome the static friction along the joint between the two completely assembled male and female joining members is...suitably larger than 100N per meter of joint length” (page 3, paragraph 5) [claim 2]. Constructing a joint with high separation force as taught by Palsson provides a stronger, more reliable connection between panels.

- g. Colada et al. and Palsson are analogous art because both are from the field of endeavor of interlocking floor panels.
- h. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the separation force requirements taught by Palsson to the joint of Colada et al. in order to create a stronger connection between adjacent panels.

*FIG. 29*

16. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriau et al. (U.S. Patent No. 6,006,486) in view of Palsson (International Publication Number WO 01/75247) as applied to claims 2-6 and 14-16 above, and further in view of Shimmin et al. (U.S. Patent No. 4,518,641).

- a. Moriau et al. in view of Palsson discloses a joint as set forth above [claim 2].
- b. Moriau et al. does not expressly disclose: the rough surface is comprised of particles bonded to the edges [claim 11]; the particles range in size from 50 microns to 2 mm [claim 12]; or that the particles are harder than the core material [claim 13].
- c. Shimmin et al. discloses a surface coating of rounded quartz sand particles ("non-slip particles" 22, Fig. 2) [claim 11] with a size range of 0.3 mm to 2.0 mm ("The particles preferably lie...especially in the range 0.3 mm to 2.0 mm," column 4, lines 11-13) [claim 12] that are harder than the fiberboard core material disclosed by Moriau et al. [claim 13]. Coating the joint surfaces of Moriau et al. with a particulate substance as taught by Shimmin et al. would decrease joint slippage, resulting in increased joint stability.
- d. Furthermore, the examiner takes OFFICIAL NOTICE that sand particles have a higher hardness index than fiberboard.
- e. Moriau et al. and Shimmin et al. are analogous art because both disclose surface treatments.

- f. At the time of the invention, it would have been obvious replace the lacquer floor joint coating of Moriau et al. with the non-slip coating taught by Shimmin et al. in order to limit the movement between adjacent panels.

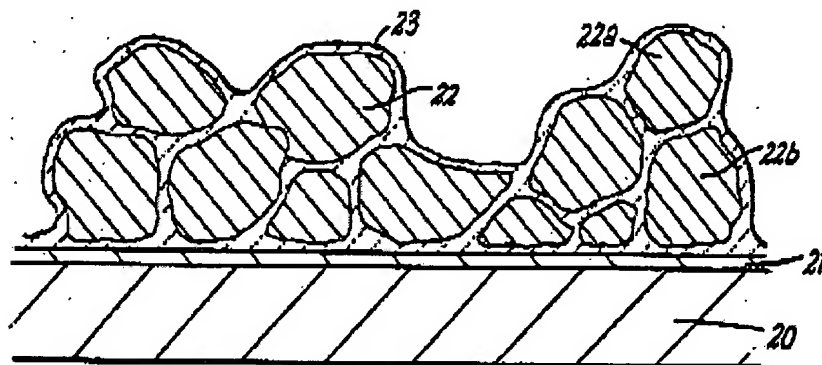


FIG. 2

Reproduced from U.S. Patent No. 4,518,641

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The examiner notes that Kesavan et al. (U.S. Patent No. 5,971,113) teaches that "quartz,...zirconium sand, and the like" (column 2, lines 51-52) have a Mohs hardness of 8.0 to 9.5. Furthermore, Kapgan (U.S. Patent No. 6,846,226) teaches that wood has a Mohs hardness less than 5.5 (column 3, lines 12-13). Since 5.5 is less than 8.0, these references teach that the quartz sand of Shimmin et al. is harder than the wood-based fiberboard of Moriau et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Branon C. Painter whose telephone number is (571)

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270-3110. The examiner can normally be reached on Mon-Fri 7:30AM-5:00PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on (571) 272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Batson
Supervisory Patent Examiner
Art Unit 3609

Branon Painter
06/07/2007